1st & Final Bill W:O: BE/ELE/RRN/W.O/18/2021-22 Dtd: 28/12/2021

Job: 016-21-00009

**M. A. R. 57 (Rule 116)**

Measurement Book

No. E 372101

Serial No. ...

Name of work Providing high intensity illumination to Ayyappa temple junction, Sahithyakoota junction From Bed circle U-turn, Mathyalanagar junction To ..... and Rajgopal circle of ward No-16 Jalahalli

Name of Contractor of nature of Agency. BWF

Date of commencement of work. Under R.R. Nagar Zone. M/s. Niharika Electricals,

| Date | Full description, etc, of work | Number | Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1 | Earthwork excavation by manual means for foundation of building water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5m in depth including dressing the bottom and sides of pits and trenches, including breaking of clods complete as per specification | Cum → | 3.072 | X 226.0 | = 694.00 | | |
| 2. | Providing and laying in position reinforced cement Cum Concrete of Design Mix M20 with OPC @ 320 kgs. with 20 mm and down size graded granite metal coarse aggregates @ 0.69 cum etc as per specifications No KBS. | Cum → | 2.704 | X 3542.0 | = 9578.00 | | |

4.1, 4.6 etc

EE (Elec.)

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 3. Providing and laying in position plain cement concrete cum of mix 1:4:8 with OPC @ 180 Kgs, with 40mm and down size graded gr metal coarse aggregates @ 0.85 cum and fine aggregates @ 0.5 Cum. Machin mixed concrete laid in layars not exceeding 15 cm thick, well compacted, in foundation, including cost of all Materials, labour, Horn carry complete as per specifications. Specification No- KBS H.1, H.2 | | | | | | |
| | Cum → 0.112 x 2354.0 = 264.00 | | | | | | |
| | Providing T.M.T Steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapp and/or welding wherever required, tying with binding wire a anchoring to the adjoining members. etc complete as per the specifications. | | | | | | |
| | C&fe | | | | | | |
| | kg → 80 x 70.0 = 5600.00 | | | | | | |

AEE (Elel) C

**M. A. R. 57 (Rule 116)** No. E 372102

Measurement Book

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Number | Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 5. | Supply of LED flood light luminaire with pressure die cast aluminium housing body for optimal thermal dissipation lamp compartment comprising of earth glare clear diffuser with Injection moulded poly carbonate clear glass material, deliverng Superior sunny hours etc complete as per the Specifications. CEPE Each → 12 X 6989.0 = 83868.00 | | | | | | |
| 6. | wiring for Lighting Power circuit using one of FRLS PVC insulated 1100V grade, multistrand copper with low conductor resistance Single core in open or concealed system of wiring with specified IS - 694 : conforming to latest amendments 16 sqmm | | | | | | |
| | Per Mtr → 15 X 36.0 = 540.00 | | | | | | |

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 7 | Supplying and drawing Flexible Multicore Cable Manufactured with electrolytic grade flexible copper with low conductor conforming to IS:8130-1984 and PVC insulation sheathed etc. complete. C&FC | | | | | Per Mtr → 32 × 54.0 = 1728.00 | |
| 8. | Supplying and fixing of solar hue level Street light Control switch single phase including suitable capacity Contactor 3 KW. | | | | | Each → 6 × 4361.0 = 26166.00 | |
| 9. | Supplying and fixing miniature circuit breakers on existing MES distribution Boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with short circuit breaking capacity of 10K and complete wiring as required conforming to IEC 60898 40 Amps DP | | | | | Each → 6 × 856.0 = 5136.00 | |

Certified that the measurements were checked by me on 5/11 Officer in charge of work

satisfactorily executed.

Certified that ...

# M. A. R. 57 (Rule 116)

## Measurement Book

No. E 372103

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 10. | Fabricating supplying and mounting MS. Box made out SWG suitable for floor/wall mounting, fully weather proof with provision for better heat dissipation, provided with hinged front cover, etc complete as per the specification. 16 SWG (Item No. 5.42.2, Page No 30 (PW. P&I WTD - Ele SR 2019-20) C&PC | | | | | | |
| | | | | | Sq cm → 79800 X 0.35 = 27930.00 | | |
| 11. | Supplying and fixing angle iron frame work fabricated out of M.S. angle iron and M.S. flat with bolts, washers, etc, and painted with 2 coats of red oxide and then two coats of approved paint. 40X40X6mm | | | | | | |
| | | | | | Per mtr → 24 X 89.0 = 2136.00 | | |

Checked by ... Officer in charge of ...

**M. A. R. 57 (Rule 116)**
**Measurement Book**

No. E 372104

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Number | Dimensions: Length | Dimensions: Breadth | Dimensions: Depth | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 14. | Supplying and fixing of porcelain fuse channel with nut out on existing wooden panels using necessary nuts, bolts and washers 100 Amps | Each → 12 | × 198.0 | | = 2376.00 | | |
| 15. | Supplying and fixing hylum plastic sheet 3mm thick with necessary nitches for fixing switches, regulators, etc. and fixing C&C on existing wood or metal body using N.F. screws. | Sq cm → 14900 | × 0.24 | | = 3576.00 | | |
| 16 | Supplying of 1.1 KV LT UG cable XLPE or Heat resistant PVC insulated PVC extruded inner sheath armoured UG. LT cable as per IS-1554 or IS-7098 Armouring strip thickness. on average +5% and resist 14 ohms/kms as per IS-3975 4 core 16 Sq mm | Mtr → 248 | × 85.0 | | = 21080.00 | | |

... by me on ... charge of work

**M. A. R. 57 (Rule 116)**
Measurement Book

No. E 372105

Serial No. .....
Name of work ..... From ..... To .....
Name of Contractor of nature of Agency.....
Date of commencement of work.....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 20 | Supplying and fixing 11 KV class UG cable compound complete washers etc 16 sqmm | L.T cast iron pot heads suitable for filled with necessary bitumen/moulting with terminals. clamps, bolts, nuts. and Each → 4 × 75.0 = 300.00 / | | | | | |
| 21. | Supplying and fixing of heavy duty cable glands suitable for UG cable of 1.1 KV class (Metal only) 32 mm dia. Each → 8 × 54.0 = 432.00 / | | | | | | |
| 22. | Supply and laying double walled corrugated (DWC) HDPE pipe including all necessary connecting sockets/couplings/Tees/Bends of same materials in existing trench as per IS 14930 part II suitable for drawing underground cables 50mm OD / 38 mm ID Mtr → 150 × 85.0 = 12750.00 / | | | | | | |

**M. A. R. 57 (Rule 116)** No. E 372106
Measurement Book

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Number | Dimensions | | Depth | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | | Length | Breadth | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 26. | Fabricating, supplying and erecting swaged tubular pole of height ~~—~~ Mtr having three sections and providing two coats of red oxide paint and finished with two coats of enamelled paint of approved quality and colours as M.S base plate of suitable size welded at the bottom of the pole etc complete as per the specification (Smt Pb, 165.1mm dia 4.85mm thick x 2m Ht, 139.7mm dia 4.5mm thick x 2m Ht, 114.3mm dia 3.65mm thick) as per IS 4140 Sp 32. Each 16 x 10998.0 = 175968.00 — | | | | | | |
| 27. | Fabricating, supplying and erection of Mtrs. long hot dip galvanized Octagonal pole with BS EN 10025 grade — | | | | | | |

**M. A. R. 57 (Rule 116)** No. E 372107

Measurement Book

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 29. | Supply of LED street light luminaire with pressure dice cast. aluminium housing body for optimal thermal dissipation. Lamp compartment comprising of anti glare clear diffuser with injected moulded polycorbonate material. delivering Superior light output. Rated life running Hrs 50000 Hrs @ lumen maintenance of 70%, maximum light intensity should be between 60 degree to 70 degrees. CCT 5500k, LED efficiency > 130 lm/w, nominal CRI luminaire manufacturer should have in-house facility accred. by NABL/CPRI & any Government Certified agency & Design & Devel facility. LED street lights, 90 Watts. | | | | | | |

C&C

AEE (E&M)

NO → 5 × 4111.0 = 20555.00

I the ... certified that it ... checked by me on ...

**M. A. R. 57 (Rule 116)** No. E 372108

Measurement Book

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| | 33. Supplying and stringing of 1.1 KV grade Aerial Bunched cable stranded & Compacted Aluminium phase conductor, and stranded Messanger conductor with all aluminium Alloy, phase conductor is insulated with XLPE Compound. insulated Messanger with specified IS-14255: 1995 & Conforming to GTP of GROUP-A 1-2x16+1x25 Sq. mm. CE/C | | per Mtr | | | 2197 x 92.0 = 202124.00 | |
| | 34. Suspension clamp Assembly 16 to 70 mm (Excluding pole clamp & Eye Hook) SE/C AEE (Elec.) | | Set | | | 70 x 145.0 = 10150.00 | |

**M. A. R. 57 (Rule 116)** No. E 372109

Measurement Book

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | | Dimensions | | | Contents | Reference to last Measurement |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| S.NO | LOCATION | | AB cable in Mtrs | | 90W LED Fittings | Timer Bore | U.G cable in MTRS. |
| 1 | Pole NO-1 to 2 | | 25 | | 1 | - | - |
| 2 | Pole NO-2 to 3 | | 25 | | 1 | - | - |
| 3 | Pole NO-3 to 4 | | 25 | | 1 | - | - |
| 4 | Pole NO-4 to 5 | | 25 | | 1 | - | - |
| 5 | Pole NO-5 to 6 | | 25 | | 1 | - | - |
| 6 | Pole NO-6 to 7 | | 25 | | 1 | - | - |
| 7 | Pole NO-7 to 8 | | 25 | | 1 | - | - |
| 8 | Pole NO-8 to 9 | | 25 | | 1 | - | - |
| 9 | Pole NO-9 to 10 | | 25 | | 1 | - | - |
| 10 | Pole NO-10 to 11 | | 25 | | | | |

**M. A. R. 57 (Rule 116)** No. E 372110

Measurement Book

Serial No. .....

Name of work ..... From ..... To .....

Name of Contractor of nature of Agency.....

Date of commencement of work.....

| Date | Full description, etc, of work | Dimensions | | | | Contents | Reference to last Measuremer |
|---|---|---|---|---|---|---|---|
| | | Number | Length | Breadth | Depth | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| S.L. | AB cable laying - BEL Circle under pass to Double side Service Road. | | | | AB Cable (mtrs) | | |
| 1 | Pole NO. 1 to 2 | | | — | 35 | | |
| 2. | Pole No 2. to 3 | | | — | 35 | | |
| 3. | Pole NO 3. to 4 | | | — | 35 | | |
| 4. | Pole NO 4 to 5 | | | — | 35 | | |
| 5. | Pole NO 5 to 6 | | | — | 35 | | |
| 6. | Pole NO 6 to 7 | | | — | 35 | | |
| 7. | Pole NO 7 to 8 | | | — | 35 | | |
| 8. | Pole NO 8. to 9 | | | — | 35 | | |

BR No-02
18/05/22

# MEASUREMENT BOOK

| Date | Full description, etc, of work | Dimensions: Number | Length | Breadth | Depth | Contents |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36 | Pole No 36 to 37 | — | 35 | | | |
| 37 | Pole No 37 to 38 | — | 35 | | | |
| 38 | Pole No 38 to 39 | — | 35 | | | |
| 39 | Pole No 39 to H0 | — | 35 | | | |
| H0 | Pole No H0 to H1 | — | 35 | | | = 90 + 437 + 1670 = 2197 |
| H1 | Pole No H1 to H2 | — | 35 | | | |
| H2 | Pole No H2 to H3 | — | 35 | | | |
| H3 | Pole No H3 to HH | — | 35 | | | |
| HH | Pole No HH to H5 | — | 35 | | | |
| H5 | Pole No H5 to H6 | — | 35 | | | |
| H6 | Pole No H6 to H7 | — | 35 | | | |
| H7 | Pole No H7 to H8 | — | 35 | | | |
| H8 | Pole No H8 to H9 | — | 35 | | | |
| | Total = AB Cable | | 1670 M | | | |

Adjustments Details
IT ..... 7,99,744/-
CGST .....
SGST .....
CHF ..... 800/-
ESD .....
LC .....
FINE .....
OTHERS —
TOTAL 30,276/-
NETT 7,68,670/-

Passed for Rs. 7,99,744/- Only
Nett Cheque Rs. 7,68,670/- Only
Adjustment Rs. 30,276/- Only
Rs in Words Seven Lakh Ninty Nine Thousand Seven Hundred Seventy Four Only

Accts Supd.
RRNZ
BBMP